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Q13

1. (Once Amended) An isolated protein capable of affecting an ABA response and comprising:

(i) a hydrophobic C-terminus;

(ii) at least one coiled coil region;

(iii) an EF-hand consensus sequence;

(iv) a nucleotide binding site; and optionally

(v) a hydrophilic N-terminus;

or a biologically active fragment or variant thereof;

wherein said protein, fragment or variant thereof affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

2. (Once Amended) An isolated protein according to claim 1 which is capable of being cleaved by the toxin botulinum C.

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4. (Twice Amended) An isolated protein according to Claim 1 wherein the hydrophobic C-terminus comprises the sequence from position 282 to position 296 of the amino acid sequence shown in SEQ ID NO:2 .

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5. (Once Amended) An isolated protein according to claim 4 wherein the hydrophobic C-terminus comprises the sequence from position 280 to position 294 of the amino acid sequence shown in SEQ ID NO:2.

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6. (Twice Amended) An isolated protein according to Claim 1 wherein said at least one coiled coil region comprises the sequence from position 210 to position 247 of the amino acid sequence shown in SEQ ID NO:2.

7. (Twice Amended) An isolated protein according to Claim 6 wherein said at least one coiled coil regions comprises the sequence from position 216 to position 240 of the amino acid sequence shown in SEQ ID NO:2.

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8. (Twice Amended) An isolated protein according to Claim 1 wherein said hydrophilic N-terminus comprises the sequence from position 1 to position 280 of the amino acid sequence shown in SEQ ID NO:2.

9. (Once Amended) An isolated protein according to claim 8 wherein the hydrophilic N-terminus comprises the sequence from position 1 to position 279 of the amino acid sequence shown in SEQ ID NO:2.

10. (Twice Amended) An isolated protein according to Claim 1 wherein said nucleotide binding site comprises the sequence of positions 114 to 119 of the amino acid sequence shown in SEQ ID NO:2.

11. (Twice Amended) An isolated protein according to Claim 1 wherein the nucleotide binding site comprises the sequence of positions 116, 118 and 120 of the amino acid sequence shown in SEQ ID NO:2.

12. (Twice Amended) An isolated protein according to Claim 1 wherein said EF-hand consensus sequence comprises the sequence from position 16 to 28 of the amino acid sequence shown in SEQ ID NO:2.

13. (Twice Amended) An isolated protein according to Claim 1 wherein said hydrophobic C-terminus comprises a membrane spanning region.

14. (Twice Amended) An isolated protein according to Claim 1 wherein there are three coiled coil regions.

15. (Twice Amended) An isolated protein according to Claim 1 wherein said at least one coiled coil region corresponds to an epimorphin pattern.

16. (Twice Amended) An isolated protein according to Claim 6 wherein said at least one coiled coil region corresponds to an epimorphin pattern.

17. (Twice Amended) An isolated protein according to Claim 1 that is derived from a plant or a mammal.

18. (Once Amended) An isolated protein comprising the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4, or a biologically active fragment or variant thereof, wherein said protein, fragment thereof or variant thereof affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

19. (Twice Amended) An isolated method of screening for protein-protein interaction comprising:

a) contacting a protein according to any one of Claims 1-18 with an expressed candidate ABA signalling component; and

b) detecting interaction between said protein and said ABA signalling component.

20. (Once Amended) An isolated protein selected using the method of claim 19.

57. (Added) An isolated protein which affects an ABA response and comprises an amino acid sequence having at least 50% homology to the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4, or a biologically active fragment thereof, wherein said protein or fragment thereof affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

58. (Added) The isolated protein of Claim 57, comprising an amino acid sequence having at least 75% homology to the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4, or a biologically active fragment thereof, wherein said protein or fragment thereof affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

59. (Added) The isolated protein of Claim 57, comprising an amino acid sequence having at least 85% homology to the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4, or a biologically active fragment thereof, wherein said protein or fragment thereof affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

60. (Added) The isolated protein of Claim 57, comprising an amino acid sequence having at least 95% homology to the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4, or a biologically active fragment thereof, wherein said protein or fragment thereof affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

61. (Added) An isolated protein which affects an ABA response and comprises the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4, or a biologically active fragment thereof, wherein said protein or fragment thereof affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

62. (Added) An isolated protein encoded by a nucleic acid sequence comprising nucleotide positions 18 to 917 of SEQ ID NO:1 or nucleotide positions 77 to 991 of SEQ ID NO:3, wherein said protein affects ABA signalling as measured by its ability to affect ABA-mediated control of ion channels.

63. (Added) An isolated protein according to Claim 62 capable of being cleaved by the toxin botulinum C..

64. (Added) An isolated protein according to Claim 1, wherein said protein affects ABA-mediated control of guard cell K^+ and Cl^- channels.

65. (Added) An isolated protein according to Claim 1, wherein said protein affects ABA-mediated stoma closure regulation in a plant.